



REMARKS

This Application has been carefully reviewed in light of the Office Action mailed May 23, 2000. In order to advance prosecution of this Application, Applicant has responded to each notation of the Examiner. Applicant respectfully requests reconsideration, further examination, and favorable action in this case.

Allowable Claims

Applicant notes with appreciation the Examiner's indication that Claims 2, 4, 5, 10-14, 17-20, and 24 would be allowable if rewritten to include the limitations of the base claims and any intervening claims. Applicant has amended Claims 2, 4, 5, 10-13, 17-20, and 24 to include the limitations of their respective base claims. Applicant respectfully requests withdrawal of the objection and full allowance of Claims 2, 4, 5, 10-13, 17-20, and 24. Because Claim 14 depends from Claim 13, Applicant also respectfully requests withdrawal of the objection and full allowance of Claim 14.

Section 102 Rejections

The Examiner rejected Claims 1, 3, 6-9, 15, 16, 21-23, and 25 under 35 U.S.C. §102(b), as being unpatentable over U.S. Patent No. 4,955,038 issued to Lee et al. ("Lee"). Applicant respectfully traverses this rejection for the reasons discussed below.

Amended Claim 1 recites a radio frequency tag that includes "a threshold voltage generator coupled to a local power supply and operable to generate a threshold voltage signal on a threshold voltage generator output." The radio tag also includes "a comparator having a first comparator input coupled to an antenna to accept a received signal of less than 500 millivolts and a second comparator input coupled to the threshold voltage generator output to receive the threshold voltage signal." The comparator is "powered by the local power supply and operable to demodulate the received signal based on a comparison of the received signal to the threshold voltage signal."

Lee, on the other hand, discloses a RF receiver that uses a receiver chip to receive signals from an antenna. (*Col. 12, lines 54-58*). The receiver chip 210 includes a comparator 420, which

is coupled to the antenna 121. (*Col. 12, lines 54-58*). The comparator has two inputs, which are called "A+" and "A-." (*Col. 12, line 57*). As illustrated in Figures 2a and 4a, both inputs of the comparator are coupled to the antenna.

Lee fails to teach or suggest the use of a threshold voltage generator. Lee couples a comparator to an antenna, without using a threshold voltage generator to demodulate a received signal. Lee lacks any teaching or suggestion of using a threshold voltage generator "operable to generate a threshold voltage signal on a threshold voltage generator output" as recited in Claim 1. Also, Lee couples both inputs of the comparator to the antenna. Lee lacks any teaching or suggestion of using a comparator that has "a second comparator input coupled to the threshold voltage generator output to receive the threshold voltage signal" as recited in Claim 1. As a result, Lee fails to teach or suggest Claim 1.

Amended Claim 21 recites "accepting a received signal," "generating a threshold voltage signal less than 500 millivolts," "comparing the received signal with the threshold voltage signal," and "generating a digital output based on the comparison of the received signal to the threshold voltage signal." As described above, Lee fails to teach or suggest using a threshold voltage generator to generate a threshold voltage signal. As a result, Lee fails to teach or suggest Claim 21. Accordingly, Applicant respectfully requests withdrawal of this rejection of Claims 1 and 21, and Claims 3, 6-9, 15, 16, 22, 23, and 25-29 depending therefrom.

The Examiner also rejected Claims 1, 6, 8, 9, 17, 21, and 22 under 35 U.S.C. §102(b), as being unpatentable over U.S. Patent No. 5,448,242 issued to Sharpe et al. ("Sharpe"). Applicant respectfully traverses this rejection for the reasons discussed below.

Amended Claim 1 recites that the comparator is "operable to demodulate the received signal," where the received signal is "less than 500 millivolts." Sharpe, on the other hand, describes a transponder having a "low power stage." (*Col. 28, lines 58-63*). According to Sharpe, the low power stage detects when a field strength exceeds 500 mV. (*Col. 28, lines 58-63*). Sharpe does not teach or suggest using a comparator that is "operable to demodulate the received signal," where the received signal is "less than 500 millivolts." As a result, Sharpe fails to teach

or suggest all elements of Claim 1. For at least these reasons, Applicant respectfully requests withdrawal of this rejection and full allowance of Claim 1, and Claims 3, 6-9, 15, 16, and 26 depending therefrom.

Amended Claim 21 recites "generating a threshold voltage signal less than 500 millivolts," "comparing the received signal with the threshold voltage signal," and "generating a digital output based on the comparison." As described above, Sharpe fails to teach or suggest using a comparator that is "operable to demodulate the received signal," where the received signal is "less than 500 millivolts." As a result, Sharpe fails to teach or suggest all elements of Claim 21. Applicant respectfully requests withdrawal of this rejection and full allowance of Claim 21, and Claims 22, 23, 25, and 27-29 depending therefrom.



CONCLUSION

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests reconsideration and full allowance of all pending claims.

If the Examiner believes a telephone conference would advance prosecution of this case, the undersigned attorney for Applicant, Terry J. Stalford, stands willing to conduct such a telephone interview at the convenience of the Examiner. Mr. Stalford may be reached at 214-953-6477.

Applicant has included an Amendment Fee Transmittal form and a check under 37 C.F.R. § 1.16(c) for the amendments to the claims. Applicant does not believe that any additional fees are due. However, the Commissioner is hereby authorized to charge any additional fees or credit any overpayments to Deposit Account No. No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Applicant

Terry J. Stalford
Reg. No. 39,522

2001 Ross Avenue
Dallas, Texas 75201-2980
(214) 953-6477

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